tect labral and chondral lesions for revision hip arthroscopy.
Study Design: Retrospective review/Case Series
Methods: We performed a single-surgeon, retrospective review of 70 revision hip arthroscopies (62 patients) and assessed the correlation between magnetic resonance arthrography and intra-operative findings. There were 43 females and 19 males, with a mean age of 36 years. Radiologic interpretation was compared to surgical findings.
Results: In regards to labral tears, the sensitivity, specificity, positive predictive value, and negative predictive value were: 82%, 70%, 94%, and 39% respectively. In regards to chondral damage, the sensitivity, specificity, positive predictive value, and negative predictive value were: 65%, 90%, 94%, and 50% respectively.
Conclusions: The study shows the utility of MRA to assist in the diagnosis and treatment of patients with on-going or recurrent symptoms who have had prior hip arthroscopy. However, our data show that magnetic resonance arthrography is superior at ruling in, rather than ruling out, a diagnosis, with PPV of 94% for labral and chondral pathology, and a NPV of 39% for labral tears, and 50% for chondral damage.

Paper 39: Continuous Groin Hip Pain after Total Hip Replacement: Arthroscopic Treatment of 19 Cases

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SUMMARY

Arthroscopy may be a useful toll also in treatment of painful total hip replacement

DATA

One of the potential reason of pain after primary total hip replacement is soft tissue impingement. Most commonly, this entity has been described as impingement of the iliopsooas tendon (IPT) on the acetabular cup. Patients present with chronic groin pain exacerbated with hip flexion both in the supine and seated position. Most of the time, the components appear radiologically stable, and the prospective of a major revision of a well fixed uncemented implant it is poorly accepted by the patient. We report on a series of nineteen consecutive arthroscopies performed in painful hip replacements due to soft tissue impingement.
Materials and Methods: from January 2008 to December 2010 we treated 19 patients, 12 Females and 7 males. Mean age was 65 yrs (51 - 75). All patients presented continuous severe groin pain resistant to conservative treatment. Average time elapsed from primary THR was 18 months. Meticulous evaluation of other possible major causes of pain such as infection or component loosening, requiring revision, were excluded. In all cases, typically, pain was increased with active flexion of the hip. In 9 cases, CT scan showed protrusion of the anterior cup rim due to retroversion, in 7 cases due to oversizing. HHS was recorded pre-operative 1 month and 6 months after surgery. All patients were treated arthroscopically in the supine position. Synovitis and intrarticular presence of blood were a constant finding. Fibrous tissue adhesions and thickening of the capsule occupying the anterior portion of the artificial joint were always detected. Only in 10 cases it was possible to identify the tendinous portion of the iliopsoas embedded into the anterior fibrosis. Treatment consisted in extended synoviectomy, debridement of scar tissue and release of IP tendon when present.
Results: Average follow up in this series is 14 months (6-29) and pre-operative HHS was 56 (44-65). 16/19 patients reported a significant immediate postoperative benefit. Average post-operative HHS was 94 (84-99) and 90 (80-98) at 6 months. 3 patients reported sporadic symptoms but were anyway satisfied of the operation. In one patient we observed partial recurrence of pain after 12 months. This patient was successfully treated with steroid injections. We observed a slight tendency of better results in the group of patients were the IPT was visible. We had 1 extravasation of irrigation fluid into the retroperitoneal and intraperitoneal cavities that has been immediatly detected during surgery due to patient complaining of acute abdominal pain. Abdominal sonography revealed presence of intra- and retroperitoneal liquid, which was considered to be irrigation fluid. The irrigation fluid was absorbed within 36 hours without further treatment.
Conclusions: Arthroscopic debridement of soft tissue impingement hap proved to be a very successful treatment in this series with a high degree of patient satisfaction. Longer term results are needed to confirm the possibility to avoid component revision in these patients.

Paper 40: Clinical Examination Of The Ligamentum Teres- A Description And Validation Of The LT Test

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SUMMARY

The LT test is a new clinical examination test for assessing the ligamentum teres, and we are presenting the details of how to perform the test, and its validation.

DATA

Introduction: Ligamentum teres (LT) pathology has been identified as a significant cause of hip pain in patients undergoing hip arthroscopy. However, there has been no reliable clinical test available to predict the presence of LT pathology prior to surgery. We have developed The LT test (a new clinical test) to assess LT pathology. Our hypothesis is that this test will reliably predict the presence of LT pathology.

Methods: A prospective study was performed on 29 consecutive patients. Prior to undergoing hip arthroscopy, each patient was examined independently by two experienced hip surgeons using this test. The examiners were blinded to the patients' histories and imaging findings. The test was performed with the patients' hip flexed to full flexion without tilting of the pelvis. The hip was then extended by 30 degrees. From this position, the hip was moved into full abduction and then adducted 30 degrees. The hip was then internally and externally rotated through full range. The presence of pain is considered a positive test.

The clinical examination results were recorded in our hip arthroscopy database.

At the time of arthroscopic surgery, the ligamentum teres was examined in neutral position, full internal and external rotation. The ligament was carefully probed to assess for the presence of any tears during these manoeuvres. Any pathology identified, including tears and synovitis were recorded.

Results: Of the 29 patients examined, 18 had a positive test. 14 were confirmed at surgery to have LT pathology:

-Grade 1 tear 0
-Grade 2 tear 7
-Grade 3 tear 2
-Synovitis 5

11 patients had a negative test, and of these, 9 had a normal intact LT.

-Synovitis 1
-Grade 2 tear 1

The sensitivity of the test was 83%, and specificity 90%. The positive predictive value was 93%, and negative predictive value was 77%. The kappa coefficient for interobserver reliability was 0.72.

Conclusion: The PODS test is an effective way to assess the presence of LT pathology with moderate to high interobserver reliability.

Paper 41: Hip Arthroscopy for the Diagnosis and Treatment of Synovial Chondromatosis of the Hip

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SUMMARY

This study aims to evaluate the use of arthroscopy in the diagnosis and treatment of hip synovial chondromatosis.

DATA

Introduction: This study aims to evaluate the use of arthroscopy in the diagnosis and treatment of hip synovial chondromatosis.

Materials and Methods: Twenty-nine patients with hip synovial chondromatosis treated with arthroscopy between 1993 and 2006 were reviewed retrospectively. The mean age was 40.6 years. The mean duration of symptoms at arthroscopy was 52 months. All patients complained of pain and 62.5% had mechanical symptoms. There was limited ROM in 57.7% and a limp in 27.6% of patients. Twenty three patients had a minimum follow up of 12 months or had a second procedure within 12 months.

Results: Synovial chondromatosis was detected in 62% of patients' imaging studies but was seen at arthroscopy in all patients. Other findings include labral changes in 77.8%, femoral head changes in 82.7%, and acetabular changes in 88% of patients. Six patients had another arthroscopy at an average of 48 months with one requiring an arthrotomy 5 months later. Two of the six patients had a grade 3 cartilage lesion at the index procedure. One patient with a grade 3 lesion at the initial arthroscopy required an arthrotomy 14 months later. Five patients required a total hip replacement at an average of 52.4 months. Four of the five patients had a Grade 3 or 4 cartilage lesion at the initial surgery. Fifty percent of patients were doing well at an average of 64.2 months requiring no additional treatment. Only one of the 11 patients had a cartilage lesion of at least grade 3.

Conclusion: Radiographs,including MRI, are not sensitive enough to detect all cases of synovial chondromatosis especially if the loose bodies are not ossified. In addition, there are more extensive articular changes and more loose bodies seen intraoperatively than radiograph-